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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/758,610	01/11/2001	Sylvia H. Pas	TI-22398	8979

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EXAMINER
MOORE, KARLA A

ART UNIT	PAPER NUMBER
1763	3

DATE MAILED: 06/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/758,610	PAS, SYLVIA H.	
	Examiner	Art Unit	
	Karla Moore	1763	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-20 is/are pending in the application.

4a) Of the above claim(s) ~~1-20~~ 14-20 is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-13 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) 1-20 are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 11 January 2001 is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

   I. Claims 1-13, drawn to a semiconductor processing apparatus, classified in class 118, subclass 719.

   II. Claims 14-20, drawn to a semiconductor processing method, classified in class 438, subclass 745.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions II and I are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case, the apparatus as claimed could be used to process an optical device rather than a semiconductor or it could be used for etching.

3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

4. During a telephone conversation with Jackie Garner on 3/20/03 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-13. Affirmation of this election must be made by applicant in replying to this Office action. Claims 14-20 withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

   A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-3 and 5-7 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,609,689 to Kato et al.

7. Kato et al. discloses a processing system comprising: a process module (Figure 6, 41 A-C; column 5, rows 50-60) operable to intentionally add at least one layer to a single semiconductor wafer; a transfer chamber module (Figure 6, 1; column 3, rows 18-31) used to align the semiconductor wafer for the process module, the transfer module operable to expose the semiconductor wafer to a vaporous solution, the vaporous solution substantially inert with respect to the semiconductor wafer.

8. Examiner notes that although the prior art does not disclose discharging the same material as the presently claimed invention, the prior art apparatus is not structurally different from the claimed invention and would be capable of discharging vaporous solution (i.e. a material in a gaseous state) and therefore has been applied.

9. The courts have ruled a claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. Ex parte Masham, 2 USPQ2d 1647 (Bd. Pat. App. & Inter. 1987) .

10. Further, with respect to claims 2-3 and 5-7 and the limitations drawn to the composition of the "vaporous solution" and the object treated, the courts have ruled that expressions relating the apparatus to contents thereof during an intended operation are of no significance in determining patentability of the apparatus claim. Ex parte Thibault, 164 USPQ 666, 667 (Bd. App. 1969).

11. The courts have also ruled, that the inclusion of material or article worked upon by a structure being claimed does not impart patentability to the claims. In re Young, 75 F.2d 966, 25 USPQ 69 (CCPA 1935) (as restated in In re Otto, 312 F.2d 937, 136 USPQ 458, 459 (CCPA 1963)).

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

13. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kato et al. as applied to claims 1-3 and 6-7 above, and further in view of Japanese Patent No. 09-157073 A to Mitani et al.

14. Kato et al. disclose the invention substantially as claimed and as described above.

15. However, Kato et al. fail to teach the transfer chamber module comprising one of the group consisting of synthetic resinous fluorine-containing polymer, polytetrafluoroethylene and silicon carbide.

16. Mitani et al. teach the use of a processing chamber comprising silicon carbide for the purpose preventing corrosion and cracks during processing (abstract).

17. It would have been obvious to one of ordinary skill in the art at the time the Applicant's invention was made to have provided a chamber comprising silicon carbide in Kato et al. in order to prevent corrosion or cracks during processing as taught by Mitani et al.

18. Claims 8, 9 and 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,609,689 to Kato et al. in view of Japanese Patent No. 61-054628 A to Nishimura et al.

19. Kato et al. discloses a processing system substantially as claimed and comprising: a process module (Figure 6, 41 A-C; column 5, rows 50-60) operable to intentionally add at least one layer to a single semiconductor wafer; a transfer chamber module (Figure 6, 1; column 3, rows 18-31) used to align the semiconductor wafer for the process module, the transfer module operable to expose the semiconductor wafer to a vaporous solution, the vaporous solution substantially inert with respect to the semiconductor wafer.

20. Examiner notes that although the prior art does not disclose discharging the same material as the presently claimed invention, the prior art apparatus is not structurally different from the claimed invention

and would be capable of discharging vaporous solution (i.e. a material in a gaseous state) and therefore has been applied.

21. The courts have ruled a claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. Ex parte Masham, 2 USPQ2d 1647 (Bd. Pat. App. & Inter. 1987) .

22. Further, with respect to claims 9 and 11-13 and the limitations drawn to the composition of the "vaporous solution" and the object treated, the courts have ruled that expressions relating the apparatus to contents thereof during an intended operation are of no significance in determining patentability of the apparatus claim. Ex parte Thibault, 164 USPQ 666, 667 (Bd. App. 1969).

23. The courts have also ruled, that the inclusion of material or article worked upon by a structure being claimed does not impart patentability to the claims. In re Young, 75 F.2d 966, 25 USPQ 69 (CCPA 1935) (as restated in In re Otto, 312 F.2d 937, 136 USPQ 458, 459 (CCPA 1963)).

24. However, Kato et al. fail to teach a plurality of outlets in the transfer chamber for discharging the "vaporous solution".

25. Nishimura et al. teach the use of a plurality of outlets for discharging a material for the purpose of making it feasible to process a wafer easily and evenly by controlling the discharge at different locations (abstract).

26. It would have been obvious to one of ordinary skill in the art at the time the Applicant's invention was made to have provided a plurality of outlets in Kato et al. in order to process a wafer easily and evenly by controlling the discharge at different locations as taught by Nishimura et al.

27. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kato et al. ~~as~~ and Nishimura et al. applied to claims 9 and 11-13 above, and further in view of Japanese Patent No. 09-157073 A to Mitani et al.

28. The prior art discloses the invention substantially as claimed and as described above.

29. However, the prior art fails to teach the transfer chamber module comprising one of the group consisting of synthetic resinous fluorine-containing polymer, polytetrafluoroethylene and silicon carbide.

30. Mitani et al. teach the use of a processing chamber comprising silicon carbide for the purpose preventing corrosion and cracks during processing (abstract).

12. It would have been obvious to one of ordinary skill in the art at the time the Applicant's invention was made to have provided a chamber comprising silicon carbide in the prior art in order to prevent corrosion or cracks during processing as taught by Mitani et al.

Conclusion

31. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

32.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karla Moore whose telephone number is 703.305.3142. The examiner can normally be reached on Monday-Friday, 8:30am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Mills can be reached on 703.308.1633. The fax phone numbers for the organization where this application or proceeding is assigned are 703.872.9310 for regular communications and 703.872.9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703.308.0661.

km
June 2, 2003

P. Hassanzadeh
Primary Examiner
Art Unit 1763